5/16/02

FACT SHEET

SUPPLEMENTAL TO THE PROPOSED REGULATION TO REDUCE TOXIC AIR POLLUTANTS FROM MUNICIPAL SOLID WASTE LANDFILLS

TODAY'S ACTION

- The Environmental Protection Agency (EPA) is proposing a supplement to the proposed rule to reduce toxic air pollutants from municipal solid waste landfills. This supplement would ensure that the rule will reduce toxic air pollutants from bioreactor operations (i.e. landfill operations in which liquids are added in order to increase the moisture content of the waste and subsequently speed up the biodegradation rate) at municipal solid waste (MSW) landfills.

- Toxic air pollutants, or air toxics, are those pollutants known, or suspected to, cause cancer or other adverse health effects in humans. The air toxics to be reduced by this proposed rule include, but are not limited to: toluene; benzene; xylenes; vinyl chloride; and ethyl benzene.

- The supplemental proposal requires bioreactor landfills to install the same collection and control systems required by existing emission guidelines and new source performance standards earlier than conventional landfills are required to. EPA considers earlier installation of controls for bioreactor landfills as timely in terms of environmental protection.

- EPA will take public comment for 30 days starting on the publication date in the *Federal Register*. EPA will hold a public hearing if requested within 14 days of *Register* publication.

BACKGROUND

- The Clean Air Act of 1990 requires EPA to identify source categories that emit one or more listed 188 toxic air pollutants. Municipal solid waste landfills emit approximately 30 of the 188 listed toxic air pollutants, including but not limited to, toluene, benzene, xylenes, vinyl chloride, and ethyl benzene.

- For major sources within each source category, the Act requires EPA to develop standards that restrict emissions to levels consistent with the lowest-emitting (also called best-performing) facilities.

- Major sources are those that emit 10 tons a year or more of a single air toxic or 25 tons a year or more of a combination of air toxics. Approximately 10 percent of landfills in existence since 1987 are capable of emitting toxic air pollutants at sufficient levels to be classified as major sources. Those facilities would be required to install collection and control systems required by

existing emission guidelines and new source performance standards.

- Smaller, so-called, "area sources" are those sources (landfills in this case) that are not large enough to meet the "major" source criteria. The Clean Air Act requires EPA to list those sources that represent 90 percent of the area source emissions of 30 "urban air toxics." The 30 urban air toxics are those that present the greatest threat to public health in the largest number of urban areas. Municipal solid waste landfills emit approximately 13 of the 30 hazardous air pollutants in urban areas.

- This proposed rule is based on existing EPA "emission guidelines" and EPA "new source performance standards", both of which require the best available landfill gas collection and control technology known. Under the Clean Air Act, EPA is required to set new source performance standards to ensure that emissions from newly built or reconstructed facilities meet strict limits. These limits are generally more stringent than "emission guidelines" set for pre-existing facilities already in operation.

- EPA promulgated new source performance standards/emission guidelines for landfills on March 12, 1996. The emission guidelines for existing landfills and new source performance standards for new landfills requires large new and existing landfills to collect and control landfill gas emissions. The regulations require these facilities to install equipment to collect and control landfill gas when the level of non methane organic compounds emitted, a surrogate for landfill gas, reaches at least 50 megagrams per year. When emissions reach this level, the facility is required to install a gas collection and control system within 30 months for closed areas of the landfill where waste is at least 2 years of age and for active areas of the landfill where waste is at least 5 years of age.

BENEFITS TO EARLIER CONTROLS

- Waste degrades more quickly in a bioreactor landfill than in a conventional landfill. In 90 days a bioreactor landfill generates the same amount of landfill gas that conventional/dry landfill generate in 2 years. Requiring bioreactor landfills to operate a control system on an alternative time line from that required under existing emission guidelines and new source performance standards is appropriate to effectively account for this difference in landfill gas generation.

- Timely collection and control of landfill gases could reduce emissions of air toxics ranging from 60 to 240 megagrams at a single medium sized bioreactor landfill.

- Timely control would result in capture of higher quality landfill gas for use as an alternative fuel.

WHAT THE RULE REQUIRES

- This proposed rule would affect municipal solid waste landfills with a design capacity greater

than or equal to 2.5 million megagrams and 2.5 million meters, and operate all or a portion of the landfill as a bioreactor. Within 90 days of initial liquids addition, these facilities would be required to install and operate a landfill gas collection and control system that is equivalent to the controls required by the new source performance standards and emission guidelines for landfills.

- Affected landfills will be required to conduct a control system performance test within 180 days of landfill gas control system startup.

FOR MORE INFORMATION

- Interested parties can download the proposed rule from EPA's web site at: *www.epa.gov/ttn/oarpg*. For additional information, contact Michele Laur of the EPA's Office of Air Quality Planning and Standards at (919) 541-5256 or by e-mail at *laur.michele@epa.gov*.

- EPA's Office of Air and Radiation's homepage on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The address is: *www.epa.gov/oar/*.